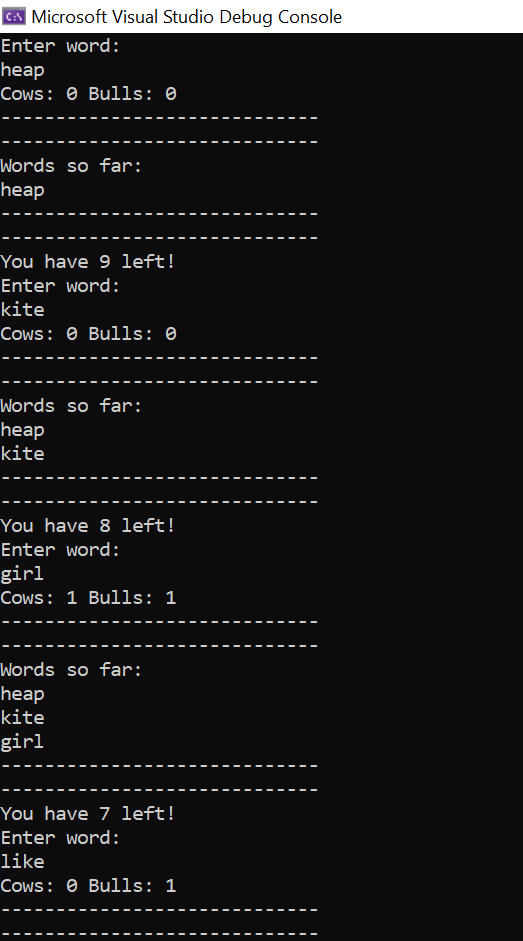
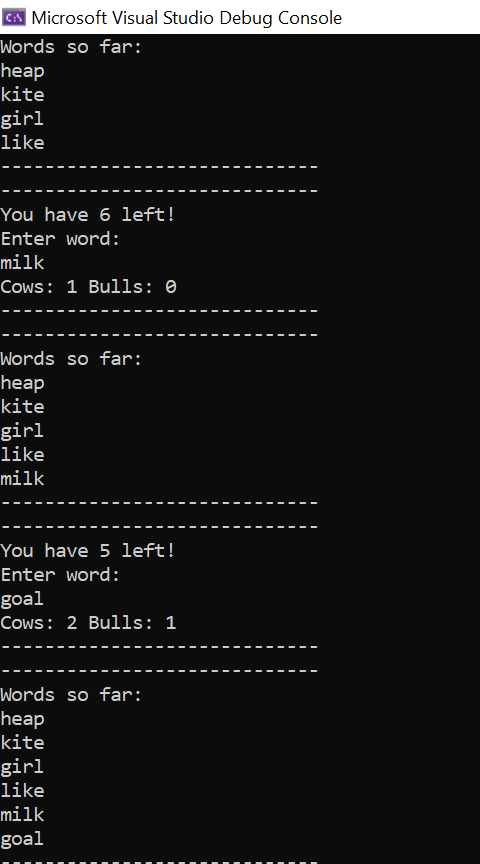
**OUTPUT:**







**CODE:**

namespace CowBullProblem

{

internal class Program

{

string GetStringInput()

{

string inp;

do

{

Console.WriteLine("Enter word:");

inp = Console.ReadLine();

if (string.IsNullOrWhiteSpace(inp) || inp.Length > 4)

{

Console.WriteLine("Invalid Input! Try again..");

}

} while (string.IsNullOrWhiteSpace(inp));

return inp;

}

void CountBullsCows(string secret, string guess, out int cows, out int bulls) {

int c=0, b=0;

int[] freq = new int[26];

for (int i = 0; i < secret.Length; i++) {

if (secret[i] == guess[i]) {

c++;

}

else

{

freq[secret[i]-'a']++;

}

}

for (int i = 0; i < guess.Length; i++)

{

if (secret[i]!= guess[i] && freq[guess[i] - 'a'] > 0) {

b++;

freq[guess[i]-'a']--;

}

}

cows = c;

bulls = b;

}

void PrintWords(string[] words)

{

Console.WriteLine("-----------------------------");

Console.WriteLine("Words so far:");

for (int i = words.Length-1; i >= 0; i--)

{

if (string.IsNullOrEmpty(words[i])){

break;

}

Console.WriteLine(words[i]);

}

Console.WriteLine("-----------------------------");

Console.WriteLine("-----------------------------");

}

static void Main(string[] args)

{

Program program = new Program();

string word = "golf";

string input;

int cows,bulls;

int attempts = 10;

string[] words = new string[10];

do

{

input = program.GetStringInput();

program.CountBullsCows(word, input, out cows, out bulls);

Console.WriteLine($"Cows: {cows}\tBulls: {bulls}");

Console.WriteLine("-----------------------------");

if (cows == input.Length)

{

Console.WriteLine("Bingo!!! You found the word");

break;

}

else

{

attempts--;

words[attempts] = input;

program.PrintWords(words);

Console.WriteLine($"You have {attempts} left!");

}

} while (attempts>0);

}

}

}